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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,790	12/09/2003	Michael Kilian	E0295.70190US00	4910

46630 7590 12/13/2010

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EXAMINER	
PHAM, KHANH B	

ART UNIT	PAPER NUMBER
2166	

NOTIFICATION DATE	DELIVERY MODE
12/13/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/731,790	KILIAN ET AL.	
	Examiner	Art Unit	
	Khanh B. Pham	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *65-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *65-78* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 65-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stuart et al., (US 2005/0055519), hereinafter Stuart in view of McGovern et al. (US 2005/0097260 A1), hereinafter McGovern.

Regarding claim 65, Stuart teaches a method for use in a computer system comprising at least one host and at least one storage system, the method comprising acts of:

(A) receiving a request, from the host, to delete a unit of content stored on the storage system (see paragraph [0020], Figs. 4 & 9),

(B) determining whether previously-defined retention period for the unit of content has expired; (see paragraph [0020], Figs. 4 & 9)

(C) when it is determined in the act (B) that the retention period for the unit of content has not expired, denying the request to delete the unit of content (See paragraphs [19-20], Fig. 9); and (D) when it is determined in the act (B) that the retention period for the unit of content has expired, directly deleting the unit of content in response to the request (see paragraphs [93-94], Fig. 9).

However, Stuart does not explicitly teach "wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period and at least some other content in the unit of content" as claimed.

McGovern teaches wherein a previously-defined retention period for the unit of content is stored in the unit of content, ... and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period and at least some other content in the unit of content" at [0017] and [0020]. Particularly, McGovern teaches at [0017] the content address is generated using a hash function. McGovern also teaches at [0020] the retentions period is stored in the file's "last access time" property/attribute field, that remains permanently is associated with the files.

Stuart and McGovern are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Stuart and McGovern because both are directed to method for managing file retentions. Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Stuart and McGovern in order to protect data files such that only unnecessary data can be deleted . Using the file identifier generated from the content of the file would prevent accidentally deleting files based on similar filenames.

Regarding claim 66, Stuart teaches the method, wherein the acts (A), (B) and (C) are performed by the storage system. (See paragraphs [7, 22-24]; Fig. 1)

Regarding claim 67, Stuart teaches the method, further comprising an act (D) of, prior to performing the acts (A), (B) and (C), receiving information specifying the retention period for the unit of data. (See paragraphs [32-33], Fig. 4)

Regarding claim 68, Stuart teaches the method, further comprising acts of, prior to performing the acts (A), (B) and (C):
(D) receiving the unit of data at the storage system (See paragraphs [7, 39-41]); and
(E) writing the unit of data to the storage system. ([8])

Regarding claim 69, Stuart teaches the method, further comprising acts of, prior to performing the acts (A), (B) and (C):
(F) receiving information specifying the retention period for the unit of data along with the unit of data; and (Paragraphs [32-33], Fig. 4)
(G) writing the information specifying the retention period to the storage system (paragraphs 32-42).

Regarding claim 70, Stuart teaches at least one computer readable storage medium encoded with instructions that, when executed on a computer system, perform a method for use in the computer system, wherein the computer system comprises at

least one host and at least one storage system, and wherein the method comprises acts of

(A) receiving a request, from the host, to delete a unit of content stored on the storage system (See paragraph [0020], Figs. 4 & 9); (See paragraph [20], Figs. 4+9)

(B) determining whether previously-defined retention period for the unit of content has expired; (See paragraph [0020], Figs. 4 & 9)

(C) when it is determined in the act (B) that the retention period for the unit of content has not expired, denying the request to delete the unit of content (see paragraphs [19-20], Fig. 9); and (D) when it is determined in the act (B) that the retention period for the unit of content has expired, directly deleting the unit of content in response to the request (see paragraphs [93-94], Fig. 9).

However, Stuart does not explicitly teach "wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period and at least some other content in the unit of content" as claimed.

McGovern teaches wherein a previously-defined retention period for the unit of content is stored in the unit of content, ... and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period and at least some other content in the unit of content" at [0017] and [0020]. Particularly, McGovern teaches at [0017] the content address is generated using a hash function.

McGovern also teaches at [0020] the retentions period is stored in the file's "last access time" property/attribute field, that remains permanently is associated with the files.

Stuart and McGovern are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Stuart and McGovern because both are directed to method for managing file retentions. Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Stuart and McGovern in order to protect data files such that only unnecessary data can be deleted . Using the file identifier generated from the content of the file would prevent accidentally deleting files based on similar filenames.

Regarding claim 71, Stuart teaches the at least one computer readable storage medium, wherein the acts (A), (B) and (C) are performed by the storage system (See paragraphs [7, 22-24]; Fig. 1).

Regarding claim 72, Stuart teaches the at least one computer readable storage medium, further comprising an act (D) of, prior to performing the acts (A), (B) and (C), receiving information specifying the retention period for the unit of data.

Regarding claim 73, Stuart teaches the at least one computer readable storage medium, further comprising acts of, prior to performing the acts (A), (B) and (C): (See paragraphs [32-33], Fig. 4)

(D) receiving the unit of data at the storage system (See paragraphs [7, 39-41]); and

(E) writing the unit of data to the storage system. ([8])

Regarding claim 74, Stuart teaches the at least one computer readable medium, further comprising acts of, prior to performing the acts (A), (B) and (C): (F) receiving information specifying the retention period for the unit of data along with the unit of data; and (Paragraphs [32-33], Fig. 4)
(G) writing the information specifying the retention period to the storage system. (Paragraphs 32-42).

Regarding claim 75, Stuart teaches a storage system for use in a computer system comprising at least one host and the storage system, the storage system comprising: at least one storage device to store data received from the at least one host (See paragraph [0020], Figs. 4 & 9); and at least one controller that; receives a request, from the host, to delete a unit of data stored on the storage system (See paragraph [0020], Figs. 4 & 9), wherein a previously-defined retention period for the unit of content is stored in the unit of content, determines whether the previously-defined retention period for the unit of data has expired; when it is determined that the retention period for the unit of data has not expired, denies the request to delete the unit of data (See paragraphs [19-20], Fig. 9); and when it is determined that the retention period for the unit of content has expired, directly deletes the unit of content in response to the request. (See paragraphs [93-94], Fig. 9)

However, Stuart does not explicitly teach "wherein a previously-defined retention period for the unit of content is stored in the unit of content, wherein the request identifies the unit of content using a content address generated, at least in part, from at least a portion of the content of the unit of content and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period and at least some other content in the unit of content" as claimed.

McGovern teaches wherein a previously-defined retention period for the unit of content is stored in the unit of content, ... and wherein the at least a portion of the content of the unit of content includes the previously-defined retention period and at least some other content in the unit of content" at [0017] and [0020]. Particularly, McGovern teaches at [0017] the content address is generated using a hash function. McGovern also teaches at [0020] the retentions period is stored in the file's "last access time" property/attribute field, that remains permanently is associated with the files.

Stuart and McGovern are analogous art pertinent to the problem to be solved. A skilled artisan would have been motivated to combine Stuart and McGovern because both are directed to method for managing file retentions. Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine Stuart and McGovern in order to protect data files such that only unnecessary data can be deleted . Using the file identifier generated from the content of the file would prevent accidentally deleting files based on similar filenames.

Regarding claim 76, Stuart teaches the storage system, wherein the at least one

controller receives information specifying the retention period for the unit of data (see paragraphs [7, 22-24]; Fig. 1).

Regarding claim 77, Stuart teaches the storage system, wherein the at least one controller receives the unit of data and writes the unit of data to the at least one storage device (see paragraphs [32-33], Fig. 4).

Regarding claim 78, Stuart teaches the storage system, wherein the at least one controller receives information specifying the retention period for the unit of data along with the unit of data and writes the information specifying the retention period to the at least one storage device
(paragraphs 32-42).

Response to Arguments

2. Applicant's arguments filed 11/23/2010 have been fully considered but they are not persuasive. The examiner respectfully traverses Applicant's arguments.

Regarding independent claims 65, 70 and 75, Applicant argued that Stuart and McGovern, as combined, do not teach "the at least the portion of the content of the unit of content includes the previously defined retention period". On the contrary, McGovern teaches at [0017] and [0020] that the "computed retention date is stored in the file's "last access time" property/attribute filed", and a unique key for the file is generated by applying a Hash function on the file .

Applicant then proposed a hypothetical embodiment of the McGovern's system where the file property/attribute field is separated from the file before the file is inputted into the hash function to support their argument. However, as McGovern clearly teaches that the property/attribute field "that remains permanently is associated with the file, and that , in being used for retention date" and does not teach any mechanism for separating the property/attribute field before inputting into the hash function, McGovern clearly does not provide support for Applicant's theory.

In light of the foregoing arguments, the 35 U.S.C 103 rejection is hereby sustained.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh B. Pham/
Primary Examiner
Art Unit 2166

December 7, 2010